



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,861	04/20/2006	Yukinobu Sugiyama	046124-5399	8956

23973 7590 08/05/2010
DRINKER BIDDLE & REATH
ATTN: INTELLECTUAL PROPERTY GROUP
ONE LOGAN SQUARE, SUITE 2000
PHILADELPHIA, PA 19103-6996

EXAMINER

RAMOS, JAVIER J

ART UNIT	PAPER NUMBER
----------	--------------

2625

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

08/05/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DBRIPDocket@dbr.com
penelope.mongelluzzo@dbr.com

Office Action Summary	Application No. 10/542,861	Applicant(s) SUGIYAMA ET AL.	
	Examiner JAVIER J. RAMOS	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-6 are pending in this application.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an

Art Unit: 2625

invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,256,379 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because both the claims of instant application and the claims of parent patent '379 are almost the same in scope. Omission of an element and its function in a combination is an obvious means to an end if the remaining elements perform the same function as before. *In Re Karlson (CCPA)*, 136 USPQ 184 (1963).

Further, Claim 1 of U.S. Patent No. 7,176,431 B2 also reads on claims 1-4 of the instant application since the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter which is not patentably distinct.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama et al. (US 7,193,197 B2).

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

6. In regards to claim 1, Sugiyama teaches a multiple image forming position deviation detecting device (**Fig. 1**), wherein, in order to detect the deviations of transfer positions of images in forming a multiple image, multiple image forming position deviation detection patterns, formed on a surface of an object to be detected (**A recitation of the intended use of the claimed invention must**

Art Unit: 2625

result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art; if the prior art structure is capable of performing the intended use, then it meets the claim, see *MPEP* §2114; further, this language is only contained in the claim's preamble and there is not accorded patentable weight on its own), are detected by a photodetecting means having a photosensitive region (Fig. 1**), in which pixels are arrayed two-dimensionally (**Fig. 1, pixels are represented by the two-dimensional array of objects 11_{1N} to 11_{M1}**), the multiple image position deviation detecting device wherein in the photodetecting means, a single pixel is arranged by adjacently positioning within the same plane a plurality of photosensitive portions, each outputting a current in accordance with the intensity of light made incident thereon (**Col. 26, Lines 34-39**), and in each plurality of pixels that are aligned in a first direction of the two-dimensional array, one photosensitive portion among the plurality of photosensitive portions making up each corresponding pixel is electrically connected to the same photosensitive portion of each of the other corresponding pixels (**Col. 26, Lines 40-48**), and in each plurality of pixels that are aligned in a second direction of the two-dimensional array, another photosensitive portion among the plurality of photosensitive portions making up each corresponding pixel is electrically connected to the same photosensitive portion of each of the other corresponding pixels (**Col. 26, Lines 49-57**).**

Art Unit: 2625

7. In regards to claims 2 and 4, Sugiyama teaches wherein the photodetecting means comprises: a first signal processing circuit (**Fig. 1, Object 20**), reading the output from each the photosensitive portions that are electrically connected across each of the plurality of pixels aligned in the first direction to detect the luminance profile in the second direction of the two-dimensional array based on these outputs (**Col. 27, Line 66 to Col. 28, Line 18, detecting currents from the photosensitive portions that correspond to luminance incident on the photosensitive portions**), and a second signal processing circuit (**Fig. 1, Object 30**), reading the output from each of the photosensitive portions that are electrically connected across each the plurality of pixels aligned in the second direction to detect the luminance profile in the first direction of the two-dimensional array based on these outputs (**Col. 27, Line 66 to Col. 28, Line 18, detecting currents from the photosensitive portions that correspond to luminance incident on the photosensitive portions**).

8. In regards to claim 3, Sugiyama teaches an image density detecting device (**Fig. 1**), wherein, in order to detect the densities of an image, image density detection patterns, formed on a surface of an object to be detected (**A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art; if the prior art structure is capable of performing the intended use, then it meets the claim, see MPEP §2114; further, this language is only contained**

Art Unit: 2625

in the claim's preamble and there is not accorded patentable weight on its own), are detected by a photodetecting means having a photosensitive region **(Fig. 1)**. Please see the rejection above to claim 1 for the remainder of the limitations of claim 3.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being obvious over Sugiyama et al. (US 7,193,197 B2), as applied to claims 1 and 3, in view of Ravitz (US 6,684,773 B2).

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3)

Art Unit: 2625

an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

11. In regards to claim 5, Sugiyama teaches the multiple image forming position deviation detecting device according to claim 1 **(See the rejection to claim 1)**.

It is noted, however, that Sugiyama does not specifically teach a multiple image forming device comprising: a plurality of image forming units, respectively forming different images for forming a multiple image; a multiple image forming position deviation detecting device; and wherein the deviations of the transfer positions of the images, respectively formed by the image forming units, are detected by means of the multiple image forming position deviation detecting device.

In analogous art, Ravitz teaches a multiple image forming device **(Fig. 1)** comprising: a plurality of image forming units **(Figs. 1 and 11, multiple image forming units (objects 110, 210, 310 and 410))**, respectively forming different images for forming a multiple image **(Col. 3, Lines 8-24, eaching forming unit forming an image of a different color)**; a multiple image forming position

Art Unit: 2625

deviation detecting device (**Fig. 1 and 11, Objects 90 and 128, scanner and patch sensor**); and wherein the deviations of the transfer positions of the images, respectively formed by the image forming units, are detected by means of the multiple image forming position deviation detecting device (**Col. 2, Line 62 to Col. 3, Line 7 and Col. 7, Line 27 to Col. 8, Line 25, detail the detection of patterns formed by the system that are used for alignment of the system**).

It would be have been obvious to incorporate the position deviation detection device of Sugiyama with the image forming system of Ravitz in order to accurately detect the skew of printed images and to align the image forming system.

12. In regards to claim 6, please see the rejection to claims 3 and 5, above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAVIER J. RAMOS whose telephone number is (571) 270-3947. The examiner can normally be reached on Monday to Thursday - 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark K. Zimmerman can be reached on (571) 272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Javier J Ramos/
Examiner, Art Unit 2625

/Benny Q Tieu/
Supervisory Patent Examiner, Art Unit 2625